

9800029

THE UNIVERD SHAYES OF ANTERIOR

TO ALL TO WHOM THESE PRESENTS SHALL COME;

Agricultural Research Service, Anited States Department of Agriculture

MILETTAS, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED, PLANT. THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS. A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCIL CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE GHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR ORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE SES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED PLANT VARIETY PROTECTION ACT. IN THE UNITED STATES SEED OF THIS VARIETY (I) SHALL VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF SPECIFIED BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

SOYBEAN

'Tyrone'

In Testimony Mixerof, I have hereunto set my hand and caused the seal of the Hunt Nuriety Protection Office to be affixed at the City of Washington, D.C. this thirtieth day of June in the year of our Lord one thousand nine hundred and ninety-nine.

Tan Gullever

Aust De AARD

Acting Commissioner Plant Variety Frotestion Office Agricultural Marketing Service

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REPRODUCE LOCALLY. Include form number and date or U.S. DEPARTMENT OF AGRICULTURE	op. Journals.	The following statements are ma	FORM APPROVED - OMB NO. 0581-005 de in accordance with the Privacy Act of		
AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY DIVISION - PLANT VARIETY PR	OTECTION OFFICE	The following statements are made in accordance with the Privacy Act o 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.			
APPLICATION FOR PLANT VARIETY PROTECTI	ON CERTIFICATE				
(Instructions and information collection burden stat 1. NAME OF APPLICANT(S) (as it is to appear on the Certificate)	ement on reverse)				
••	er (2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME		
Agricultural Research Service					
United States Department of Agric	ultural				
		OR5-12-1G	TYRONE		
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and C	Country)	6. TELEPHONE (include area code)	FOR OFFICIAL USE ONLY		
T. E. DEVINE, Weed Science Labora	tory	301 504 6375	PVPO NUMBER		
10300 Baltimore Avenue			980029		
Bldg 001 Room 342 BARC-West		6. FAX (include area code)	F DATE		
Beltsville, MD 20705		301 504 6491	11/19/9/		
7. GENUS AND SPECIES NAME			N G		
. GENUS AND SPECIES NAME	8. FAMILY NAME (Bots	nical)	FILING AND EXAMINATION FEE:		
Glycine Max	Legumin	osae	2450.00		
. CROP KIND NAME (Common name)			E DATE		
Sovbean	·	•	R 11/18/97		
D. IF THE APPLICANT NAMED IS NOT A "PERSON", GIVE FORM OF ORGAN	IZATION (corporation, partners	hin association atc ! (Common name)	CERTIFICATION FEE:		
Agency of the United States Govern		up; association, etc.; (Common name)	[2000		
1. IF INCORPORATED, GIVE STATE OF INCORPORATION	<u>iment</u>	12. DATE OF INCORPORATION	E DATE		
N/A			1 4/21/99		
3. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO S	SERVE IN THIS APPLICATION	AND RECEIVE ALL PAPERS	14. TELEPHONE (include area code)		
DK. T. E. DEVINE, Weed Science Lat	oratory				
10300 Baltimore Avenue	•		301 504 6375		
Bldg 001 Room 342 BARC-West Beltsville, MD 20705			15. FAX (include area code)		
Deresville, MD 20703	er er ar en ar er ar er ar er ar er		201 504 6404		
. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow	w instructions on reversel		301 504 6491		
a. M Exhibit A. Origin and Breeding History of the Variety			and the second of the second o		
b.					
c. MExhibit C. Objective Description of the Variety			The state of the s		
d. Exhibit D. Additional Description of the Variety (Optional)			•		
e. Exhibit E. Statement of the Basis of the Applicant's Ownership			the second second		
 If Voucher Sample (2,600 viable untreated seeds or, for tuber propage Filing and Examination Fee (\$2,450), made payable to "Tressurer of 			d in an approved public repository)		
DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE SOLD B			0041 444 00 444		
YES #f "yes," enswer items 18 end 19 below)	□ NO (If "no," go		83(a) of the Plant Variety Protection Acti		
DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE LIMITE	D AS TO NUMBER OF 18.	IF "YES" TO ITEM 18, WHICH CLASSES O	F PRODUCTION BEYOND BREEDER SEED?		
generations? Dyes no		FOUNDATION REGISTERED	E CERTIFIED		
. HAS THE VARIETY OR A HYBRID PRODUCED FROM THE VARIETY BEEN R	ELEASED, USED, OFFERED FO	The state of the s	· · · · · · · · · · · · · · · · · · ·		
	NO NO				
The applicant(s) declare that a viable sample of basic seed of the variety will	be furnished with application a	nd will be replenished upon request in accord	ance with such regulations as may be		
The applicant(s) decises that a viable sample of basic seed of the variety will applicable, or for a tuber propagated variety a tissue culture will be deposited	d in a public repository and mai	ntained for the duration of the certificate.			
applicable, or for a tuber propagated variety a tissue culture will be deposited. The undersigned applicant(s) is(are) the owner(s) of this sexually reproduced in	f in a public repository and mai	ntained for the duration of the certificate.			
The undersigned applicant(s) is(are) the owner(s) of this sexually reproduced of Section 42, and is entitled to protection under the provisions of Section 42 of	d in a public repository and mai or tuber propagated plant varied the Plant Variety Protection Ad	ntained for the duration of the certificate.			
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INSTRUCTIONS

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed Exhibits A, B, C, E; (3) at least 2,500 viable untreated seeds, or for tuber reproduced varieties verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$2,450 (\$300 filing fee and \$2,150 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfiled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 500, NAL Building, 10301 Baltimore Blvd., Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$300 for issuance of the Certificate.

Plant Variety Protection Office Telephone: (301) 504-5518

ITEM

- 16a. Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
 - (2) the details of subsequent stages of selection and multiplication;
 - (3) evidence of uniformity and stability; and
 - (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified.
- 16b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
 - (1) identify these varieties and state all differences objectively;
 - (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences;
 - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 16c. Exhibit C forms are available from the PVPO for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 16d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 16e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
- 17. If "Yes" is specified (seed of this variety be sold by variety name only, as a class of certified seed), the applicant may NOT reverse this affirmative decision after the variety has been sold and so labelled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
- 20. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of Regulations and Rules of Practice.)

To avoid conflict with other variety names in use, the applicant should check the variety names proposed by contacting: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center-East, Beltsville, MD 20705. Telephone: (301) 504-8089.

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Agriculture, Clearance Officer, OIRM, AG Box 1630, Jamie L. Whitten Building, Washington, D.C. 20250. When replying, refer to OMB No. 0551-0055 and form number in your letter. Under the PRA of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

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Tyrone is an F4 -derived line from the cross PA4-11g1 X Ripley (1). The F2 progeny of this cross were subject to selection for forage type at Beltsville, MD in 1990. The F3 and F4 progeny from this cross were selected for forage type at Orange, VA in 1991 and 1992. Tyrone was developed by selecting and compositing the F5 grey pubescent segregates grown at Beltsville, MD in 1993. PA4-11g1 was developed from the four way cross [Wilson 6 X Forrest (2)] X [Perry (3) X L76-0253]. Sucessive generations of progeny from this cross were subjected to selection for forage type at State College, PA in 1982 and 1984 and at Beltsville, MD in 1983 and 1985. L76-0253 is an F6 segregate of the cross Williams (4) x PI229358.

- 1. The variety 'Tyrone' has been uniform and stable for 4 years (1994-97).
- 2. We have not observed any variants in the variety 'Tyrone'.
- 3. The breeding method used to develop the variety 'Tyrone' was pedigree breeding, ear to row (or plant to row) with phenotypic selection.

'Derry', 'Donegal' and 'Tyrone' were each selected for height, vigor, lodging resistance, good vegetative appearance, and number of pods per node.

Exhibit B

The variety 'Tyrone' is most similar to the varieties 'Derry' and 'Donegal'. The varieties 'Tyrone', 'Derry', and 'Donegal' are distinguished from the classical grain-type soybean cultivars in that they grow to a much greater plant height, often exceeding 150 cm. See attached table. 'Tyrone' differs from 'Derry' and 'Donegal' in that it has gray pubescence while 'Derry' and 'Donegal' have a tawny pubescence. In addition, 'Tyrone' differs from 'Derry' and 'Donegal' in that 'Tyrone' has a buff colored hilum while 'Donegal' and 'Derry' have a black colored hilum.

EXHIBIT C

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MAY STING SERVICE
LIVESTOCK, MEAT, OR THE DIVISION
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MARYLAND 20705

OBJECTIVE DESCRIPTION OF VARIETY SOYBEAN (Glycine max L.)

NAME OF APPLICANT(S)	TEMPORA BY DESIGNATION	hui ana-
Agricultural Research Service	TEMPORARY DESIGNATION	VARIETY NAME
_United States Department of Agricultural	OR5-12-1G	TYRONE
ADDRESS (Street and No. of R.E.D. No. Co. St.	le)	FOR OFFICIAL (MT 200)
10300 Baltimore Avenue		FOR OFFICIAL USE ONLY PVPO NUMBER
BIGG UUL ROOM 342 BARC-Wear		_ **
Beltsville, MD 20705		9860029
Choose the appropriate response which characterizes the var in your answer is fewer than the number of boxes provided	jety in the features described	below When the state of the
The beautiful in the second of	late soybean variety describes	nen number is 9 or less (e.g., 0 9).
	variety description	on. Other characters should be described
1. SEED SHAPE:		
	$oldsymbol{\psi}$	•
[L] [w]	T	
1 = Spherical (L/W, L/T, and T/W ratios = < 1.2)	i il 2 = Spherical Elettoned (i	I Million S. A. O. A. Principal and A. A. A. A.
3 = Elongate (L/T ratio > 1.2; T/W = < 1.2)	4 = Elongate Flattened (I	L/W ratio > 1.2; L/T ratio = < 1.2) _/T ratio > 1.2; T/W > 1.2)
2. SEED COAT COLOR: (Mature Seed)		
Z SEED COAT COLOR: (Mature Seed)		
1 1 = Yellow 2 = Green 3 = Brown		
2 Groun 3 - Brown	4 = Black 5 = Other (S	Specify)
3. SEED COAT LUSTER: (Mature Hand Shelled Seed)		
2 1 = Dull ('Corsoy 79'; 'Braxton') 2 = Shiny ('Nebsoy	''; 'Gasov 17')	
4. SEED SIZE: (Mature Seed)		
1 4 Grams per 100 seeds	•	
5. HILUM COLOR: (Mature Seed) 984 30 April 1998		
2 = Yellow 3 = Brown 4 =	Gray 5 = Imperfect Black	6 = Black 7 = Other (Specify)
C COTYLEDON OOL OF		
6. COTYLEDON COLOR: (Mature Seed)		
1 1 = Yellow 2 = Green		
2 Green		
7. SEED PROTEIN PEROXIDASE ACTIVITY:		
1 = Low 2 = High heterogenous 80% +	20%***	
8. SEED PROTEIN ELECTROPHORETIC BAND:		
1 - Town 4 (mag)		
1 = Type A (SP1 ^a) 2 = Type B (SP1 ^b)		
9. HYPOCOTYL COLOR:		
1 = Green only ('Evans'; 'Davis') 2 = Green with br		
3 = Light Purple below cotyledons ('Beeson'; 'Pickett 71')	onze band below cotyledons ("Wo	odworth'; 'Tracy')
4 = Dark Purple extending to unifoliate leaves ('Hodgson'; 'Co	ker Hampton 2664')	
0. LEAFLET SHAPE:		
* FERTLE I SHAPE:		
3 1 = Lanceolate 2 = Oval 3 = Ovate	Am Oak . Zo	
	4 = Other (Specify)	
	•	

FORM LMGS-470-57 (6-83)

(Edition of 2-82 is obsolete.)

11. LEAF	LET SIZE:			7	
3	1 = Small ('Amsoy 71'; 'A5312') 3 = Large ('Crawford'; 'Tracy')	2 = Medium ('C	Corsoy 79'; 'Gasoy 17')		
12. LEAF	COLOR:			······································	
2	1 = Light Green ('Weber'; 'York') 3 = Dark Green ('Gnome'; 'Tracy')	2 = Medium Gr	een ('Corsoy 79'; 'Braxton	า	
		enako en esta			
t 13. FLOW	ER COLOR: 1 = White 2 = Purple	3 = White with pur	ple throat		
14. POD C	OLOR:				a a specie
2	1 = Tan 2 = Brown	3 = Black			
15. PLANT	PUBESCENCE COLOR:			-3	
1	1 = Gray 2 = Brown (Tawny)			and the second	en e
16. PLANT	TYPES:				er e
2	1 = Slender ('Essex'; 'Amsoy 71') 3 = Bushy ('Gnome'; 'Govan')	2 = Intermediate	('Amcor'; 'Braxton')		in the second of
17. PLANT	MADIT				
3	1 = Determinate ('Gnome'; 'Braxton') 3 = Indeterminate ('Nebsoy'; 'Improved Po	2 = Semi-Determ elican')	inate ('Will')		
18. MATUR	1 = 000	4=I 5= II 12=IX 13	= X II 6 = III	7 = IV 8 = V	
19. DISEAS	E REACTION: (Enter 0 = Not Tested; 1 =	Susceptible; 2 = Resistant) §	e version and the second secon	
ВАСТЕ	RIAL DISEASES:				
★ 2	Bacterial Pustule (Xanthomonas phaseoli v	ar. <i>sojensis)</i>	3		
* O	Bacterial Blight (Pseudomonas glycinea)		mands Jumpy Sequent		
* []	Wildfire (Pseudomonas tabaci)			and the same of th	
FUNGA	_ DISEASES:		Ġ Z	· · · · · · · · · · · · · · · · · · ·	The second secon
<u>. </u>	Brown Spot <i>(Septoria glycines)</i>				
	Frogeye Leaf Spot (Cercospora sojina)				
★ . 0 .	Race 1 0 Race 2 0 Ra	nce 3 0 Race 4	0 Race 5	Other (Specify)	
0	Target Spot (Corynespora cassiicola)			7	. 4.31
2	Downy Mildew (Peronospora trifoliorum va	r. manshurica) (mo	derately resist	ant)	
0 1	Powdery Mildew (Microsphaera diffusa)				. "
★ 0 1	Brown Stem Rot (Cephalosporium gregatum	o)			
LZ.,	item Canker (<i>Diaporthe phaseolorum</i> var. ca	(So aulivora)	outhern Stem Can	ker)	

FORM LMGS-470-57 (6-83)

19.	DISEASE RE	REACTION: (Enter 0 = Not Testeri: 1 = Susceptible C = C						
.		REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant) (Continued) L DISEASES: (Continued)						
*		od and Stem Blight <i>(Diaporthe phaseolorum</i> var; <i>sojae)</i>						
	O Purple Seed Stain (Cercospora kikuchii)							
		hizoctonia Root Rot (Rhizoctonia solani)						
,	•	nytophthora Rot (Phytophthora megasperma var. sojae)						
*	2 Race		Race 6 1 Race 7					
	1 Race	ace 8 2 Race 9 2 Other (Specify) Race 10, 12, 13, 14						
	VIRAL DIS	Olseases: Other Races 15 16 17 18 19 2						
	Bud (d Blight (Tobacco Ringspot Virus)	3/9/1998					
	O Yello	llow Mosaic (Bean Yellow Mosaic Virus)						
*	O Cowp	wpea Mosaic (Cowpea Chlorotic Virus)						
	O Pod M	d Mottle (Bean Pod Mottle Virus)						
*	O Seed I	d Mottle (Soybean Mosaic Virus)						
	NEMATODE	DE DISEASES:						
ſ	Soybe	bean Cyst Nematode (Heterodera glycines)						
*	0 Race 1	e 1 0 Race 2 1 Race 3 0 Race 4 1 Other (Specify)	Race 5					
	0 Lance	ce Nematode (Hoptolaimus Colombus)	_					
* [0 Southe	thern Root Knot Nematode (Meloidogyne incognita)						
* [0 Northe	hern Root Knot Nematode (Meloidogyne Hapla)						
	O Peanut	ut Root Knot Nematode <i>(Meloidogyne arenaria)</i>						
	0 Renifor	form Nematode (Rotylenchulus reniformis)						
	OTHER	ER DISEASE NOT ON FORM (Specify):						
20. PH	VSIOI OGICA	CAL PERSONAL A						
	٦ I	CAL RESPONSES: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)						
, L		Chlorosis on Calcareous Soil						
21. INS		(Specify)	· · · · · · · · · · · · · · · · · · ·					
Го	Mayinan	TION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)						
6		an Bean Beetle (Epilachna varivestis)	-					
		Leaf Hopper (Empoasca fabae)						
Other (Specify)								
22. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED.								
	Shape Shape	NAME OF VARIETY CHARACTER	NAME OF VARIETY					
Leaf S		Seed Coat Luster						
Leaf (Seed Size	· · · · · · · · · · · · · · · · · · ·					
Leaf S	iize	Seed Shape						
		Seedling Pigmentation						
C1444								

23. GIVE DATA FOR SUBMITTED AND SIMILAR STANDARD VARIETY: Paired Comparison Data

VARIETY	NO. OF DAYS	PLANT LODGING SCORE	CM PLANT HEIGHT	LEAFLET SIZE		SEED CONTENT		SEED SIZE G/100	NO. SEEDS/
	MATURITY			CM Width	CM Length	% Protein	% Oil	SEEDS	POD
Submitted			178	11.0	16.0			14.20g	3
Hutcheson Name of Similar Variety			59	9.9	13.3				

PUBLICATIONS USEFUL AS REFERENCE AIDS FOR COMPLETING THIS FORM:

- 1. Caldwell, B.E., ed. 1973. Soybeans: Improvement, Production, and Uses. Amer. Soc. Agron. Monograph No. 16.
- 2. Buttery, B.R. and R.I. Buzzell. 1968. Peroxidase activity in seeds of soybean varieties. Crop Sci., 8: 722-725.
- 3. Hymowitz, T. 1973. Electrophoretic analysis of SBTI-A₂ in the USDA soybean germplasm collection. Crop Sci., 13: 420-421.
- 4. Payne, R.C. and L.F. Morris. 1976. Differentiation of soybean cultivars by seedling pigmentation patterns. J. Seed Technol. 1: 1-19.

REPRODUCE LOCALLY. Include form number and date on all reproductions.		ORM APPROVED - OMB NO. 0581-005
U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE	The following statements are made	e in accordance with the Privacy Act o rwork Reduction Act (PRA) of 1995 .
EXHIBIT E STATEMENT OF THE BASIS OF OWNERSHIP	Application is required in order to certificate is to be issued (7 U.S.C. until certificate is issued (7 U.S.C. 2	determine if a plant variety protectio. 2421). Information is held confidentia 2426).
1. NAME OF APPLICANTIS) Agricultural Research Service	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME
United States Department of Agriculatural	ORG-12-1G	TYRONE
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) T. E. DEVINE, Weed Science Laboratory	5. TELEPHONE (include area code) 301 504 6375	6. FAX (include area code) 301 504 6491
10300 Baltimore Avenue Bldg 001 Room 342 BARC-West	7. PVPO NUMBER	
Beltsville, MD 20705	98000	29
8. Does the applicant own all rights to the variety? Mark an "X" in appropriate le	block. If no, please explain.	167
		YES NO
Is the applicant (individual or company) a U.S. national or U.S. based company If no, give name of country	/?	YES NO
10. Is the applicant the original owner? YES NO If no, please an	swer the following:	
	on or the remaining.	
a. If original rights to variety were owned by individual(s), is (are) to	the original owner(s) a U.S. nation	al(s)?
YES NO If no, give name of country		
b. If original rights to variety were owned by a company, is the original	ginal owner(s) a U.S. based comp	any?
YES NO If no, give name of country		
11. Additional explanation on ownership (If needed, use reverse for extra space):		
Agency of the United States Government		
PLEASE NOTE:		
Plant variety protection can be afforded only to owners (not licensees) who meet of	one of the following criteria:	
If the rights to the variety are owned by the original breeder, that person must of a country which affords similar protection to nationals of the U.S. for the sai	be a U.S. national, national of a U	JPOV member country, or national
If the rights to the variety are owned by the company which employed the originationals of a UPOV member country, or owned by nationals of a country which genus and species.	inal breeder(s), the company must ch affords similar protection to na	be U.S. based, owned by tionals of the U.S. for the same
3. If the applicant is an owner who is not the original owner, both the original own	ner and the applicant must meet o	ne of the above criteria.
The original breeder/owner may be the individual or company who directed final brefor definition.	eeding. See Section 41(a)(2) of the	ne Plant Variety Protection Act
According to the Paperwork Reduction Act of 1995, no persons are required to recontrol number. The valid OMB control number for this information collection collection is estimated to average 10 minutes per response, including the time for and maintaining the data needed, and completing and reviewing the collection of in	is 0581-0055. The time requirations, searching	ired to complete this information
The U.S. Department of Agriculture (USDA) prohibits discrimination in its progrational disability, political beliefs, and marital or familial status. (Not all prohibited base alternative means for communication of program information (braille, large print, as at (202) 720-5881 (voice) or (202) 720-7808 (TDD). To file a complaint, write the Secretary of Agriculture, U.S. Department of Agriculture (202) 720-1127 (TDD). USDA is an equal employment opportunity employer.	ses apply to all programs.) Pers udiotape, etc.) should contact the	ions with disabilities who require USDA Office of Communications

The United States Department of Agriculture Agricultural Research Service Washington, D.C. 20250

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NOTICE OF RELEASE OF TYRONE SOYBEAN

The U.S. Department of Agriculture, Agricultural Research Service announces the release of a new forage soybean cultivar named Tyrone. Tyrone is released because of its superior forage yielding ability and is not intended for grain production.

Tyrone is an F4-derived line from the cross PA4-11g1 X Ripley. The F2 progeny of this cross were subject to selection for forage type at Beltsville, MD in 1990. The F3 and F4 progeny from this cross were selected for forage type at Orange, VA in 1991 and 1992. Tyrone was developed by selecting and compositing the F5 grey pubescent segregates grown at Beltsville, MD in 1993. PA4-11g1 was developed from the four way cross [Wilson 6 X Forrest] X [Perry X L76-0253]. Successive generations of progeny from this cross were subjected to selection for forage type at State College, PA in 1982 and 1984 and at Beltsville, MD in 1983 and 1985. L76-0253 is an F6 segregate of the cross Williams x PI229358.

Tyrone has been evaluated, under the experimental designation OR5-12-1G, for forage production at Chazy, NY; State College, PA; Orange, VA; Yadkin and Forsythe Counties, NC; Waseca and Rosemont, MN; Maquoketa, IA; and Fayetteville and Rohwer, AR. In replicate 1994, 1995, and 1996 trials in Orange, VA, Tyrone produced an average of 8 percent more total dry matter per acre than the adapted grain type soybean, Hutcheson (3.8 tons versus 3.5 tons). Tyrone is an exceptionally tall, late maturing cultivar with high forage yield potential and moderate resistance to lodging. It is recommended for forage production in the southern States.

Tyrone is a Group VII cultivar. Tyrone has white flowers and grey pubescence. Seeds are yellow with shiny seed coat luster and brown hila. It has the *Rps 2* gene for resistance to phytophthora root rot (caused by *Phytophthora sojae* Kaufmann & Gerdemann). It is resistant to bacterial pustule [caused by *Xanthomonas campestris* pv. *glycines* (Nakano) Dye]. It is moderately resistant to downy mildew [caused by *Peronospora manshurica* (Naum.) Syd. ex Gaum.] It is susceptible to the soybean cyst nematode (*Heterodera glycines*

Ichinohe), and to southern stem canker disease [caused by *Diaporthe phaseolorum* (Cke. & Ell.) Sacc. var. *meridionalis* Morgan-Jones]

Breeders seed of Tyrone will be maintained by the Weed Sciences Laboratory, Plant Sciences Institute, USDA-ARS, Beltsville, MD. Seeds of Tyrone will be deposited in the National Plant Germplasm System where it will be available for research purposes, including development and commercialization of new cultivars. Exclusive rights for production and sale of Tyrone will be awarded on a competitive basis. This intent will be published in *The Federal Register*. Protection for Tyrone will be sought under the Plant Variety Protection Act of 1994.

Edward B. Knighing

SEP 2 4 1997

Administrator, Agricultural Research Service U.S. Department of Agriculture

Date